TCAP Achievement Levels: Standards Setting Process and Implementation for English III

The Background:

Tennessee state law, Tenn. Code Ann. §49-1-302(a)(8), gives the State Board of Education the duty and authority to set policies governing all curricula and courses of study in K-12 public schools, including the adoption of standards.

The Tennessee Department of Education, Office of Assessment Design conducted Tennessee Comprehensive Assessment Program (TCAP) Achievement Level panel meetings for the End of Course (EOC) English III assessment on June 25-26, 2012. Achievement level meetings, both nationally and historically in Tennessee, are conducted when the state develops a new assessment or the state's curriculum standards change significantly. Both factors are in evidence and require new achievement levels be updated and adopted to reflect the efforts of the Tennessee Diploma Project (TDP) as related to college and career readiness.

During the testing year 2011-12, the current vendor, Pearson Education Measurement (PEM) with sub-contractor Educational Testing Service (ETS) conducted achievement level panel meetings for the English III EOC assessment. Tennessee educators, who were knowledgeable in the content area, familiar with Tennessee new high school graduation requirements, and drawn from various stakeholder groups statewide, served on the panels. The panels included twenty-four (24) educators from across the state. Three of these educators were either adjunct or full professors in the Tennessee higher education community. The panel's work concluded with starting points for discussion/determination of achievement levels on the English III assessment. The vendor (PEM/ETS) was responsible for overseeing the standard-setting process and for training selected panelists in standard-setting procedures. The vendor was also required to use an empirical standard-setting process in which the panelists reviewed TN curriculum standards and established achievement level recommendations using items representing forms of the 2011 -12 assessment.

Immediately following the panel meetings on June 29, 2012, the Technical Advisory Committee (TAC) comprised of seven (7) nationally recognized standard-setting professionals, one (1) in-state representative, and one (1) third-party reviewer, reviewed and determined that the process used for the English III assessment was of the highest standards and was carried out well. The TAC concluded that TDOE and its contractors developed an appropriate standard setting plan, faithfully implemented the plan and can have confidence that the resulting performance standards provide a sound and defensible basis for assessing and evaluating student academic achievement in English III.

In 2010-2011 TDOE conducted a similar standard setting for Algebra II. The TAC recommended at that time that a 3rd party review be included in all future standard settings. TDOE implemented this recommendation and included a 3rd party review for the English III standard setting process. During the English III standard setting the TAC noted one anomalous rating and recommended that in the future, TDOE develop guidelines for removing outliers from the data set prior to conducting the standard-setting workshop.

Following the TAC review and recommendation, the English III recommendations were shared with the department staff and commissioner.

The efforts of the Tennessee Diploma Project (TDP) provided for the establishment of rigorous K-12 college- and career-ready curriculum standards, an alignment of assessments to the college- and career-ready curriculum standards, and a new strategic assessment implementation plan to include new achievement levels, collegeand career- ready definitions and descriptors, communications to the public, and professional development for practitioners. The department initiated and received an external curriculum alignment study; established committees to revise curriculum revised curriculum standards to collegeand career-readiness specifications in math, reading/language arts, and science; recommended for review and approval the revised curriculum standards to the State Board of Education (SBE); negotiated with vendors appropriate timelines for alignment and development of new TCAP End of Course assessments; and implemented new assessments in the 2009-10 school year and beyond up to ten (10) EOC assessments. The English III assessment is the second of two (2) anchor assessments (Algebra II became operational for the 2011-12 SY) that may be used by TN higher education for placement purposes.

Upon the commissioner's and departmental review of the recommended achievement level cut scores, the decision was made to use an equipercentile approach for establishing a concordance table to compare student test scores for 2012 English III versus preliminary 2012 and final 2011 ACT English and Reading results. The goal was to ensure that the achievement levels were appropriately rigorous given the fact that English III may be an anchor assessment used by Tennessee higher education for placement purposes and student performance on ACT English and Reading should correspond closely given the fact that the ACT is used to determine college readiness. Upon the commissioner's and departmental review of the concordance table, the decision was made to increase achievement level cut scores by one conditional standard error of measurement to more closely align students' ability to achieve proficiency on English III with their ability to achieve college readiness as defined by ACT.

Because of this process, the English III End of Course assessment performance levels and cut scores are proposed here at a more rigorous level than those currently in place for the English I and II End of Course assessments. We believe that the methodology used for English III more appropriately represents college and career readiness. As we move to PARCC assessments for the 2014-15 school year, all cut scores will be set at a college- and career-ready level. In the interim, having higher cut scores will not negatively impact either TVAAS scores or accountability results.

The Recommendation:

The Department of Education recommends that new assessment achievement standards be adopted on final reading. The SBE staff concurs with this recommendation.



STATE OF TENNESSEE **DEPARTMENT OF EDUCATION**

BILL HASLAM GOVERNOR 6th FLOOR, ANDREW JOHNSON TOWER 710 JAMES ROBERTSON PARKWAY NASHVILLE. TN 37243-0375 KEVIN HUFFMAN COMMISSIONER

To: Members and Executive Staff, Tennessee State Board of Education

From: Erin O'Hara, Assistant Commissioner

Data and Communications

Re: SBE Agenda Item - TCAP English III Achievement Levels: Standards

Setting Process and Implementation

Date: August 8, 2012

The Tennessee Department of Education, Office of Assessment Design and its vendors Pearson and ETS conducted Tennessee Comprehensive Assessment Program (TCAP) Achievement Level panel meetings for TCAP End of Course (EOC) English III in June 2012. The performance (achievement level) standard setting process is used to determine the depth and breadth of the content standards a student must have to demonstrate competency at each achievement level (Below Basic, Basic, Proficient and Advanced).

The panels, comprised of Tennessee teachers and educational administrators, were chosen for their knowledge in the tested content, their familiarity with the students, and their diverse backgrounds, demographics, and experiences. The diverse group of panelists represented Tennessee's various regions including urban and rural settings.

An augmented Bookmark Method was used to set achievement levels for English III. The Bookmark Method is a three-round standard (achievement level) setting process that requires panelists to independently examine test items and place bookmarks at the points at which they consider students to have demonstrated sufficient knowledge and skills at each achievement level. Additionally, reference data were provided showing TN student's performance on 4th and 8th grade NAEP and 8th grade Explore, 10th grade PLAN, and 11th grade ACT national assessments. For all TCAP tests, the panelists' work concluded with starting points for discussion/determination of performance at the achievement levels of Below Basic, Basic, Proficient and Advanced.

Immediately following the educator panel meetings, the Technical Advisory Committee (TAC) comprised seven (7) nationally recognized standard-setting professionals, one (1) in-state representative, and one (1) third-party reviewer met on June 29, 2012 and reviewed then determined that the process used for each assessment was of the highest standards and was carried out well.

The recommendations from the standards setting and TAC meetings as well as a follow-up study aimed at ensuring the achievement levels were sufficiently rigorous

were provided to Department of Education staff including the commissioner for final review and recommendation to the TN State Board of Education for the final phase of discussion and approval.

The table below summarizes the achievement levels as recommended for final discussion that would lead to SBE approved achievement levels for English III 2011-2012 assessments and until such time as a change in curriculum standards and assessments are required in future years.

Table 1.

Performance Levels for TCAP End of Course English III
(Total number of students assessed in 2011 - 12 = 59,904)

TCAP End of Course (EOC English III) 55 Items				
Achievement Levels	Below Basic	Basic	Proficient	Advanced
Scale Score Levels	500 - 676	677 - 724	725 - 753	754 - 900
% and Number of Students at Level	25.4% 15,224	36.9% 22,127	27.1% 16,231	10.6% 6,322

Memorandum

To: Tennessee Department of Education

From: Marianne Perie, Technical Advisory Committee (TAC) Chair

Date: July 2, 2012

Re: Review of English III Standard Setting

The Tennessee Department of Education (TDOE) adopted new curriculum framework and content standards designed to support the state's vision and mission to prepare all Tennessee students for successful post-secondary work, education and citizenship. As part of the process, the TDOE and its assessment contractors, Pearson and Educational Testing Service (ETS), developed and implemented procedures to establish new performance standards for a number of state assessments including, most recently, the English III End of Course (EOC) Assessment.

The standard setting process facilitated by the contractors was based on the widely-used Bookmark method. However, the traditional procedure was modified to promote the TDOE's goal of identifying standards associated with college and career readiness. These modifications included introducing NAEP and ACT performance data during the standard setting process and including post-secondary faculty among the standard setting panelists.

On May 11, 2012, Tennessee's national Technical Advisory Committee (TAC) convened via WebEx to review the standard setting activities (see Appendix for a roster of the TAC membership). This review included careful scrutiny of the design and plans for conducting the standard setting workshop. The TAC made several recommendations for improvement and then endorsed the plan. On Friday, June 28, 2012, the TAC convened in Nashville to implementation and results of the standard setting procedures. Based on the evidence and information available, TAC reached the following conclusion:

The TDOE and its contractors developed an appropriate standard setting plan, effectively incorporating the TAC suggestions from the earlier meeting. Moreover, based on the information provided, including the review of an external evaluator, that plan appears to have been faithfully implemented. The grounding of the plan in commonly-accepted practices and the fidelity of its implementation suggest that the TDOE can have confidence that the resulting performance standards provide a sound and defensible basis for assessing and evaluating student academic achievement in English III.

The TAC noted one anomalous rating and recommended that in the future, TDOE develop guidelines for removing outliers from the data set prior to conducting the standard-setting workshop.

The TAC understands that the next step in standard setting involves additional review of the recommended performance standards and that the Tennessee State Board of Education is ultimately

charged with establishing the performance standards for Tennessee assessments. This is fitting given the central role that these performance indicators play in state education policy.

The TAC will continue to work with the TDOE on standard setting, transitioning to the Common Core State Standards, and other technical issues to provide feedback, advice, and recommendations as needed.

Appendix

Tennessee National Technical Advisory Committee Members

Gregory Cizek, Ph.D.	Professor of Educational Measurement and Evaluation, University of North Carolina at Chapel Hill
Laura Hamilton, Ph.D.	Senior Behavioral Scientist, RAND Corporation
Douglas N. Harris, Ph.D.	Associate Professor of Economics, University Endowed Chair in Public Education, Tulane University
Suzanne Lane, Ph.D.	Professor of Research Methodology, University of Pittsburg School of Education
Sheryl Lazarus, Ph.D.	Senior Research Associate, National Center on Educational Outcomes
Marianne Perie, Ph.D.	Senior Associate, National Center for the Improvement of Educational Assessment

(HumRRO)

Principal Scientist, Human Resources Research Organization

Lauress Wise, Ph.D.